REMARKS/ARGUMENTS

Entry of these Remarks and reconsideration of all claims remaining of record is earnestly requested. Claims 80-82 and 84-223 are currently pending.

Claims 80-82 and 84-223 stand rejected under the judicially created doctrine of obviousness-type double patenting as allegedly being unpatentable over commonly assigned U.S. Patent No. 6,646,653 (the '653 patent). Applicants respectfully traverse this rejection for at least the following reasons:

Applicants' claims 80-82 and 84-223 are directed toward a "*home video game system* for use with a *television type monitor* display" and require, among other things, "a housing having an insertion port for a *removable* memory". Moreover, Applicants' independent claim 80 requires a programmable graphics processor for rendering and displaying polygon-based 3D graphic objects *which is contained within the removable memory device*. These features are not recited in the claims of the '653 patent nor are these features be obvious from the contexts of those claims. Although claim 4 of the '653 patent requires an "external" memory, a "removable" memory is clearly different and distinguishable over an "external" memory — i.e., an "external" memory is not necessarily "removable". Consequently, Applicants respectfully contend that claims 80-82 and 84-223 are patentably distinct over the claims of the '653 patent at least because of the recited features which include a home video game for use with a TV monitor, a housing having an insertion port for a removable memory device and the rendering of polygon-based 3D objects.

Claims 80, 135 and 206 stand rejected under 35 U.S.C. § 103 as being unpatentable over U.S. Patent 5,016,876 to Loffredo in view of U.S. Patent 5,190,285 to Levy et al. Applicants

traverse this rejection and respectfully request reconsideration of this rejection for at least the following reasons:

The Office Action alleges that the Loffredo '876 patent (with reference to Figure 1) discloses a programmable graphics processor ("a digital computer 22") and a main processor ("DMA coprocessor 130") that communicates information relating to one or more polygon-based 3D graphic objects to the programmable graphics processor. The Office Action also alleges: "Loffredo discloses that the DMA is a digital coprocessor to other processor such as digital computer 20. Thus, either DMA or digital computer can be called as a main processor."

Applicants respectfully contend that the Loffredo '876 reference does not disclose a main processor for executing at least a portion of a game program together with a programmable graphics processor in a home video game system for rendering polygon-based 3D graphic objects, as set forth in applicants' claims. In fact, the Loffredo '876 patent is primarily directed toward a video display Direct Memory Access ("DMA") "co-processor" (130) that works with a Graphics System Processor (GSP 22) in a video game to allow rapid access to memory to provide the ability to overlay successive planes of image data at a sufficiently rapid rate to provide real-time animation effects. (See for example, the '876 patent at column 9, lines 31-37 and Figure 1.) There is no disclosure or discussion in the Loffredo '876 patent of the operation or capabilities of the Graphics System Processor 22 or of any other processor that works with the GPS 22 for executing at least a portion of a game program, as set forth in applicants' claims. Moreover, Loffredo's DMA co-processor can not function as a "main processor" for executing at least a portion of a game program nor can it function as a "programmable graphics processor", as set forth in applicants' claims. Applicants' claims 80-82 and 84-223 clearly require both a main processor for executing at least a portion of a game program *and* a programmable graphics

processor for rendering polygon-based 3D graphic objects. Neither the Loffredo '876 patent nor U.S. Patent 5,190,285 to Levy et al., considered either alone or together, teach or suggest a home video game system having a main processor for executing at least a portion of a game program *and* a separate *programmable* graphics processor for rendering polygon-based 3D graphic objects, as set forth in Applicants' claims. Accordingly, it is submitted that claims 80, 135 and 206 and the claims dependent thereon are patentably distinct over the combined teachings of Loffredo and Levy et al.

Claims 81-134, 136-205 and 207-223 were rejected under 35 U.S.C. §103(a) as being unpatentable over the Loffredo '876 patent in view of the Levy et al. '285 patent and further in view of a PC TECH Journal publication by McNierney. Applicants also traverse this rejection and respectfully request reconsideration of this rejection for at least the following reasons:

The McNierney reference is cited for its review of the Texas Instruments TMS34010 processor architecture, which the Office Action (not the McNierney article) alleges is "responsive to specific instructions used for rendering 3D objects." However, there is no discussion or suggestion by McNierney of using the TMS processor for rendering polygon-based 3D graphic objects as set for the in Applicants' claims. Moreover, there is no teaching or suggestion of providing a home video game system having a main processor for executing at least a portion of a game program *and* a separate programmable graphics processor for rendering polygon-based 3D graphic objects. As such, the combination of Levy et al., Loffredo and McNierney do not teach or suggest a home video game system as set forth in Applicants' claims 81-134, 136-205 and 207-223.

In addition, at least with respect to Applicants' independent method claims 186, 202 and 204, neither Levy et al. nor Loffredo, nor McNierney, considered either alone or together, teach

or suggest steps for producing graphics display effects utilizing rotated and/or scaled polygon-based graphic objects, as set forth in those claims. Consequently, it is respectfully submitted that all of Applicants' pending claims are patentable over the combined teachings of these references.

In view of Applicant's foregoing remarks, it is believed that the application is in condition for allowance. Favorable consideration and allowance of this application are respectfully solicited. If any small manner remains outstanding, the Examiner is encouraged to telephone Applicants' representative at the telephone number listed below or on the following page.

Respectfully submitted,

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